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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/776,720	02/06/2001	Takatoshi Kato	50395-086	2375	
7	590 01/02/2004	EXAMINER			
McDERMOTT, WILL & EMERY 600 13th Street, N.W.			MOONEY, MICHAEL P		
	OC 20005-3096		ART UNIT	PAPER NUMBER	
_			2877		
			DATE MAILED: 01/02/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

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` <b>`</b>	•	Appl	ication No.	Applicant(s)	74				
		09/7	76,720	KATO, TAKATOS	KATO, TAKATOSHI				
,	Office Action Summary	Exar	niner	Art Unit					
			ael P. Mooney	2877					
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
THE   - Exte after - If the - If NO - Failu - Any	ORTENED STATUTORY PERIOD I MAILING DATE OF THIS COMMUN nsions of time may be available under the provision SIX (6) MONTHS from the mailing date of this come period for reply specified above is less than thirty to period for reply is specified above, the maximum size to reply within the set or extended period for repreply received by the Office later than three months ed patent term adjustment. See 37 CFR 1.704(b).	IICATION. Is of 37 CFR 1.136(a). In munication. 30) days, a reply within the statutory period will apply y will, by statute, cause the	no event, however, may a ne statutory minimum of th and will expire SIX (6) MO ne application to become A	reply be timely filed irty (30) days will be considered time INTHS from the mailing date of this INTHS from the Mailing date of this INTHS FROMED (35 U.S.C. § 133).					
1)⊠	Responsive to communication(s) fil	ed on <u>23 October</u>	· <u>2003</u> .						
2a)⊠	This action is FINAL.	2b)∐ This action	is non-final.						
3)[	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.								
Disposition of Claims									
4)⊠ Claim(s) <u>1-6</u> is/are pending in the application.									
4a) Of the above claim(s) is/are withdrawn from consideration.									
5) Claim(s) is/are allowed.									
6)⊠ Claim(s) <u>1-6</u> is/are rejected.									
	Claim(s) is/are objected to.								
8)	Claim(s) are subject to restri	ction and/or elect	ion requirement.						
Applicati	ion Papers								
	The specification is objected to by the								
10)	The drawing(s) filed on is/are	e: a)∏ accepted	or b) Objected to	by the Examiner.					
	Applicant may not request that any object		- · ·						
400	Replacement drawing sheet(s) includin		•	- ' '					
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.									
Priority under 35 U.S.C. §§ 119 and 120									
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of: <ol> <li>Certified copies of the priority documents have been received.</li> <li>Certified copies of the priority documents have been received in Application No.</li> <li>Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> </ol> </li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> <li>13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.</li> <li>37 CFR 1.78. <ol> <li>The translation of the foreign language provisional application has been received.</li> </ol> </li> <li>Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.</li> </ul>									
Attachmen			, <del>(   </del>	0 (0-0)(10) - 11					
2) Notice	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review ( mation Disclosure Statement(s) (PTO-1449)			Summary (PTO-413) Paper No. Informal Patent Application (PTo .					

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#### **DETAILED ACTION**

### Response to Amendment

The amendment filed 10/23/03 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: Applicant's references to 0.035 dB/km cannot be found in the Specification at the place Applicant stated in the 10/23/03 remarks.

Applicant is required to cancel the new matter in the reply to this Office Action.

The prior 7/14/03 non-final rejection still stands for the claims as they were stated before the 10/23/03 amendment.

The prior 7/14/03 non-final rejection is re-stated below as follows:

## Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specific range of average chromatic dispersion added to claim 1 from -0.1 to and including +0.1 (it will be understood that the units for these

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range values are ps/nm/km for the purposes of this discussion) is not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The graphs of figs. 2-3 are not precise enough to show average chromatic dispersion from -0.1 to and including +0.1 without having some additional statement(s) in the Specification showing this to be true. The graphs of figs. 2-3 do not show the precision required to make such a precise range statement without additional support in the specification (of which there is none). For example, the square-shaped "implementation example" at or near the coordinate (1.55, 0) could legitimately be interpreted as being outside the -0.1 to and including +0.1 range added to claim 1 as part of Amdt. A.

Thus claim 1 is rejected.

It is, however, acknowledged that the said amended claim 1 range would be allowable if Applicant shows that at the time the application was filed, Applicant had possession of the claimed invention including a legitimate showing within the specific said range.

Any decisions on allowability of claim 1 and its dependent claims will be deferred pending Applicant's resolution of the above issue.

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Judy et al. (5905838) and further in view of Sillard et al. (6263138).

Judy et al., at col. 14, lines 34-45, teaches an optical transmission fiber (OTF) in the range of the OTF described in the first paragraph of instant claim 6. "Obviousness of Ranges" as described in the MPEP as follows:

## 2144.05 Obviousness of Ranges

#### I. OVERLAP OF RANGES

In the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a prima facie case of obviousness exists. In re Wertheim, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); In re Geisler, 116 F.3d 1465, 1469-71, 43 USPQ2d 1362, 1365-66 (Fed. Cir. 1997) (Claim reciting thickness of a protective layer as falling within a range of "50 to 100 Angstroms" considered prima facie obvious in view of prior art reference teaching that "for suitable protection, the thickness of the protective layer should be not less than about 10 nm [i.e., 100 Angstroms]." The court stated that "by stating that suitable protection' is provided if the protective layer is about' 100 Angstroms thick, [the prior art reference] directly teaches the use of a thickness within applicant's] claimed range."). Similarly, a prima facie case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that on skilled in the art would have expected them to have the same properties. Titanium

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Metals Corp. of America v. Banner, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985) (Court held as proper a rejection of a claim directed to an alloy of "having 0.8% nickel, 0.3% molybdenum, up to 0.1% iron, balance titanium" as obvious over a reference disclosing alloys of 0.75% nickel, 0.25% molybdenum, balance titanium and 0.94% nickel, 0.31% molybdenum, balance titanium.).

Under "Obviousness of Ranges", the aforementioned citation from Judy et al. renders the first paragraph of instant claim 6 as obvious.

Furthermore, Sillard et al., at col. 2 lines 13-24, shows that the dispersion compensating optical fiber (DCF) taught in the second paragraph of instant claim 6 is obvious because the ranges stated in Sillard et al. at col. 2 lines 13-24 render the values stated in the second paragraph of instant claim 6 as obvious under "Obviousness of Ranges" as described in the above MPEP passage.

Additionally, Sillard et al. lends support to the plurality of other references which show that the range values of said second paragraph of instant claim 6 are notoriously well known (NWK).

It is NWK to use ranges as stated in the 1st paragraph of claim 6.

Thus, since the prior art, as stated above, makes it clear that using a DCF such as one in the range(s) described in the second paragraph of instant claim 6 is NWK, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use it with the optical transmission fiber described at Judy et al. col. 14, lines 34-45, which by obviousness of ranges renders the 1<sup>st</sup> paragraph of instant claim 6 obvious, for the purpose of optimizing WDM architecture.

Furthermore, claim 6 is obvious because it is NWK to use a transmitter and a receiver with the device. Thus claim 6 is rejected.

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## Response to Arguments

Applicant's arguments filed 10/23/03 have been fully considered but they are not persuasive. Applicant has not provided substantive reasons with respect to claims 1-5 for the traversal given with respect to the 7/14/03 non-final rejection. In fact, no legitimate reasoning is given. The only reasoning given with respect to claims 1-5 pertains to why the *newly amended* claims are allowable.

Furthermore, Applicant argues that the claim 6 rejection is undermined because claim 6 is directed to an optical transmission system comprising a module made of a dispersion compensating fiber having a particular chromatic dispersion (-40 ps/nm/km or less). This argument is not persuasive because, as stated in the 7/14/03 non-final rejection, Sillard et al., at col. 2 lines 13-24, shows that the dispersion compensating optical fiber (DCF) having a particular chromatic dispersion of -40 ps/nm/km or less is notoriously well known (NWK). Further, the 7/14/03 non-final rejection gives appropriate reasoning for combining the references. The rejection of claim 6 as stated in the 7/14/03 non-final rejection still stands with respect to claim 6 as claim 6 was stated before the 10/23/03 amendment.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Applicant's amendment necessitated any new ground(s) of rejection which may be presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Mooney whose telephone number is 703-308-6125. The examiner can normally be reached during weekdays, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on 703-308-4881. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7721 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956. An alternative useful number for status inquiries is 703-306-3329.

Michael P. Mooney

Examiner Art Unit 2877 Frank G. Font Supervisory Patent Examiner Art Unit 2877

FGF/mpm 12/29/03

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